

## **Kawasaki's disease**

**Previously known as** mucocutaneous lymph node syndrome

### **What is Kawasaki's disease?**

Kawasaki's disease is a rare form of vasculitis (inflammation of blood vessels). It can affect many parts of the body. The diagnosis is made when someone has a high fever and the typical changes in the skin, eyes, mouth and lymph nodes. It is a serious condition as it may affect the heart.

### **What causes Kawasaki's disease?**

The cause of Kawasaki's disease is unknown. One theory is that it may be triggered by an infection. However, this has not been proven and antibiotics are not needed. The condition is not contagious. Asian people, particularly Japanese boys, are more likely to be affected which suggests a genetic predisposition to the condition.

### **What does Kawasaki's disease look like?**

Kawasaki's disease is more common in children. Most cases occur in children under 2 years of age.

All those affected with Kawasaki's disease have a fever (up to 40°C) that continues for at least 5 days. Other features include:

- Red and swollen hands and feet. The skin peels after a few days.
- Rash over the body. The rash can look very different in different people. It typically affects the nappy area. However, it can occur anywhere on the body.
- Bright red and dry lips and "strawberry tongue" which is a medical term for a red tongue with the texture of a strawberry
- Conjunctivitis (red eyes)
- Large lymph nodes. Kawasaki's disease typically causes lumps under the skin in the neck.

At least four of these features (known as the diagnostic criteria) are needed to diagnose Kawasaki's disease. People with fever and less than four features may be diagnosed with "incomplete Kawasaki's disease".

It can be difficult to make the diagnosis as features may develop at different times. There are also similar changes caused by many infections, as well as reactions to medications and some forms of arthritis.

### **What other problems can occur with Kawasaki's disease?**

Other areas of the body can be affected, causing sore joints, headaches, diarrhoea and vomiting. The most serious complication is heart disease, including myocarditis (inflammation of the heart muscle), aneurysms (dilation of blood vessels) and damage to the heart valves.

### **How is Kawasaki's disease diagnosed?**

There is no test to diagnose Kawasaki's disease. It is diagnosed based on the appearance of the condition and whether this meets the diagnostic criteria listed above.

Investigations may be needed to exclude other infections.

When Kawasaki's disease is considered, it is very important to check which areas of the body are involved. Blood tests, an ECG (heart tracing) and echocardiogram (heart ultrasound) may be needed.

**How is Kawasaki's disease treated?**

People with Kawasaki's disease are usually treated in hospital. The goals of treatment are to manage fever and pain and to reduce inflammation and potentially long term damage to the blood vessels.

Immunoglobulin is given into the veins. A high dose of aspirin is given, usually continuing for two months. Long-term follow up by a cardiologist is recommended.

**What is the likely outcome of Kawasaki's disease?**

Affected people usually recover from the condition in 1 to 2 months. Without treatment, 20% of cases have heart damage and some may die. With appropriate treatment, the risk of permanent heart damage is less than 5%.